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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
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75	90 12/15/2004		EXAMINER			
DAVID J. POWSNER NUTTER, MCCLENNEN7 FISH LLP			FISCHER, ANDREW J			
155 SEAPORT	DE CENTER WEST BLVD.		ART UNIT	ART UNIT PAPER NUMBER		
BOSTON,, MA	A 02210-2604		3627			
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Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
		09/900,706	GRANT ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Andrew J. Fischer	3627				
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet w	ith the correspondence addres	ss			
A SH THE - Exte after - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPL' MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1: SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a reply o period for reply is specified above, the maximum statutory period v re to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a y within the statutory minimum of thin vill apply and will expire SIX (6) MOI , cause the application to become A	reply be timely filed rty (30) days will be considered timely. NTHS from the mailing date of this commu BANDONED (35 U.S.C. § 133).	unication.			
Status	,						
1)⊠	Responsive to communication(s) filed on <u>09 Secondary</u>	entember 2004					
·		action is non-final.					
3)	<u> </u>						
,	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	ion of Claims						
	Claim(s) 1-16 and 18 is/are pending in the app	lication					
	4a) Of the above claim(s) is/are withdrawn from consideration.						
	Claim(s) is/are allowed.						
·	Claim(s) 1-16 and 18 is/are rejected.						
7)	Claim(s) is/are objected to.						
8)□	Claim(s) are subject to restriction and/o	r election requirement.					
Applicati	on Papers						
9)[The specification is objected to by the Examine	r.	•				
	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
	Applicant may not request that any objection to the	· · · · · · · · · · · · · · · · · · ·	•				
	Replacement drawing sheet(s) including the correct	ion is required if the drawing	(s) is objected to. See 37 CFR 1	i.121(d).			
11)	The oath or declaration is objected to by the Ex	aminer. Note the attache	d Office Action or form PTO-1	152.			
Priority ι	ınder 35 U.S.C. § 119			·			
	Acknowledgment is made of a claim for foreign All b) Some * c) None of:		§ 119(a)-(d) or (f).				
	1. Certified copies of the priority documents						
	2. Certified copies of the priority documents		· · · · · · · · · · · · · · · · · · ·				
	3. Copies of the certified copies of the prior		received in this National Sta	ge			
* 5	application from the International Bureau See the attached detailed Office action for a list	, , , ,	received				
	and analysis solution critical density for a list	or the defined depies her	Toolived.				
Attachmen	t(s)						
	e of References Cited (PTO-892)		Summary (PTO-413)				
	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)		s)/Mail Date Informal Patent Application (PTO-152)	21			
	r No(s)/Mail Date <u>Six Separate IDSs</u> .	6) Other:		-,			

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DETAILED ACTION

Restriction

- 1. Applicants' election of Group I in the reply filed on September 9, 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse. See MPEP §818.03(a).
- 2. However, because Applicants have amended the claims such that this application now contains inventions directed only towards a single invention, a restriction is now improper. Therefore, the restriction as set forth in the previous Office Action (mailed August 8, 2004) is hereby withdrawn. Should Applicants amend any claim or add claim(s) such that this application would then contain claims directed towards two (2) or more distinct and independent inventions, an additional restriction may be required at that time. See MPEP §811.03.

Acknowledgements

- 3. Applicants' amendment filed September 30, 2004 is acknowledged. Accordingly, claims 1-16 and 18 remain pending.
- 4. This application in an image file wrapper ("IFW") application. Applicants' response is therefore broken down before being placed into the IFW system (*i.e.* claims, remarks, drawings, etc. are separated and independently scanned). To ensure proper handling by he Examiner, the Examiner highly recommends Applicants place the application serial no (*e.g.* 09/123,456) in a header or footer (or other appropriate area) of

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each page submitted. At the very least, the Examiner highly recommends this practice for all pages listing the claims.

5. This Office Action is written in OACS. Because of this, the Examiner is unable to control formatting, paragraph numbering, font, spelling, line spacing, and/or other word processing issues. The Examiner sincerely apologies for these errors.

Claim Rejections - 35 USC §112 2nd Paragraph

- 6. The following is a quotation of the 2nd paragraph of 35 U.S.C. §112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 7. Claim 10 is rejected under 35 U.S.C. 112, 2nd paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 10, the term "a style" is indefinite. Moreover, the term does not make grammatical sense. "A claim must be read in accordance with the precepts of English grammar." *In re Hyatt*, 708 F.2d 712, 714, 218 USPQ 195, 197 (Fed. Cir. 1983). In this case, "a style" is not like the other items in the disjunctive list (*i.e.* "subdivisions or division[s]...."

Claim Rejections - 35 USC §102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States. . . .

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 9. Claims 1-16 and 18, as understood by the Examiner, are rejected under 35
 U.S.C. §102(e) as being anticipated by Bye (U.S. 2002/0178109 A1). Bye discloses a user interface ('Windows' or other operating system using a Excel spreadsheet) to automatically determine an optimal markdown price for a plurality of items; displaying a table to the user (displaying the spreadsheet to the user); having the user input proposed modifications (the user changes some data in "what if" scenarios inherent in the spreadsheet) and then displaying the updated table (the table is automatically recalculated and displayed by the change of a number in a cell); the information includes markdown price (sale price) and impact of the price (profit, sales volume, revenue, etc.).

Claim Rejections - 35 USC §103

- 10. The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office Action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 1-16 and 18 are alternatively rejected under 35 U.S.C. §103(a) as being unpatentable over Bye in view of Chester et. al.'s <u>Mastering Excel 97</u>, 4th Ed ("Chester") and Levenbach et. al.'s <u>The Beginning Forecaster: The Forecasting Process Through</u>

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<u>Data Analysis</u> ("Levenbach").¹ It is the Examiner's principle position that the claims are anticipated because of the inerencies such as markdown price and impact are inherent in the spreadsheet. Moreover Chester discloses the features of the 'Excel' spreadsheet program including "What If' scenarios (See e.g. Chapter 27 in Chester).

However if not inherent, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Bye as taught by Chester and Levenbach to include the effect of changing sale price. Such a modification would have helped make the decision making process of setting a sale price more financially sound by properly analyzing the effect of such changes.

either expressly or implicitly—by Applicants to be their own lexicographer and to define a claim term to have a meaning other than its ordinary and accustomed meaning. Therefore, the Examiner starts with the heavy presumption that all claim limitations are given their ordinary and accustomed meaning. See *Bell Atlantic Network Services Inc. v. Covad Communications Group Inc.*, 262 F.3d 1258, 1268, 59 USPQ2d 1865, 1870 (Fed. Cir. 2001)("[T]here is a heavy presumption in favor of the ordinary meaning of claim language as understood by one of ordinary skill in the art."); *CCS Fitness Inc. v. Brunswick Corp.*, 288 F.3d 1359,1366, 62 USPQ2d 1658, 1662 (Fed. Cir. 2002) (There is a "heavy presumption that a claim term carries its ordinary and customary meaning.").

¹ See MPEP §2112 expressly authorizing alternative §102/§103 rejections when the question of inherency is present in the anticipation rejection.

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See also MPEP §2111.01 and *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).²

However, if Applicants disagree with the Examiner and have either (a) already used lexicography or (b) wish to use lexicography and therefore (under either (a) or (b)) desire a claim limitation to have a meaning other than its ordinary and accustomed meaning, the Examiner respectfully requests Applicants in their next response to expressly indicate³ the claim limitation at issue and to show where in the specification or prosecution history the limitation is defined. Such definitions must be clearly stated in the specification or file history. *Bell Atlantic*, 262 F.3d at 1268, 59 USPQ2d at 1870, ("[I]n redefining the meaning of particular claim terms away from the ordinary meaning, the intrinsic evidence must 'clearly set forth' or 'clearly redefine' a claim term so as to

It is the Examiner's position that "plain meaning" and "ordinary and accustomed meaning" are synonymous. See e.g. Rexnord Corp. v. Laitram Corp., 274 F.3d 1336, 1342, 60 USPQ2d 1851, 1854 (Fed. Cir. 2001) ("[A]ll terms in a patent claim are to be given their plain, ordinary and accustomed meaning . . .").

³ "Absent an express intent to impart a novel meaning, terms in a claim are to be given their ordinary and accustomed meaning. [Emphasis added.]" Wenger Manufacturing Inc. v. Coating Mach. Sys., Inc., 239 F.3d 1225, 1232, 57 USPQ2d 1679, 1684 (Fed. Cir. 2001) (citations and quotations omitted). "In the absence of an express intent to impart a novel meaning to claim terms, an inventor's claim terms take on their ordinary meaning. We indulge a heavy presumption that a claim term carries its ordinary and customary meaning. [Emphasis added.]" Teleflex Inc. v. Ficosa North America Corp., 299 F.3d 1313, 1325, 63 USPQ2d 1374, 1380 (Fed. Cir. 2002) (citations and quotations omitted).

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put one reasonably skilled in the art on notice that the patentee intended to so redefine the claim term").⁴ The Examiner cautions that no new matter is allowed.

Applicants are reminded that failure by Applicants in their next response to properly traverse this issue in accordance with 37 C.F.R §1.111(b) or to be non-responsive to this issue entirely will be considered a desire by Applicants to forgo lexicography in this application and to continue having the claims interpreted with their broadest reasonable interpretation.⁵ Additionally, it is the Examiner's position that the above requirements are reasonable.⁶ Unless expressly noted otherwise by the Examiner, the preceding discussion on claim interpretation principles applies to all examined claims currently pending.

⁴ See also Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582, 39 USPQ2d 1573, 1576 (Fed. Cir. 1996), ("[A] patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, as long as the special definition of the term is clearly stated in the patent specification or file history. [Emphasis added.]"); Multiform Desiccants Inc. v. Medzam Ltd., 133 F.3d 1473, 1477, 45 USPQ2d 1429, 1432 (Fed. Cir. 1998) ("Such special meaning, however, must be sufficiently clear in the specification that any departure from common usage would be so understood by a person of experience in the field of the invention."). See also MPEP §2111.01, subsection titled "Applicant May Be Own Lexicographer" and MPEP §2173.05(a) titled "New Terminology."

⁵ See 37 C.F.R. §1.104(c)(3) which states in part: "the examiner may rely upon admissions by applicant . . . as to *any matter* affecting patentability [Emphasis added.]"

⁶ The Examiner's requirements on this matter are reasonable on at least two separate and independent grounds. First, the Examiner's requirements are simply an express request for clarification of how Applicants intend their claims to be interpreted so that lexicography (or even an *attempt* at lexicography) by Applicants is not inadvertently overlooked by the Examiner. Second, the requirements are reasonable in view of the USPTO's goals of compact prosecution, productivity with particular emphasis on reductions in both pendency and cycle time, and other goals as outlined in the USPTO's The 21st Century Strategic Plan, February 3, 2003 available at www.uspto.gov/web/offices/com/strat21/index.htm (last accessed December 9, 2004).

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13. To the extent that the Examiner's interpretations are in dispute with Applicants' interpretations, the Examiner hereby adopts the following definitions—under the broadest reasonable interpretation standard—in all his claim interpretations. Moreover, while the following list is provided in accordance with *In re Morris*, the definitions are a guide to claim terminology since claim terms must be interpreted in context of the surrounding claim language. Finally, the following list is not intended to be exhaustive in any way:

Table "1. In programming, a data structure usually consisting of a list of entries, each entry being identified by a unique key and containing a set of related values. A table is often implemented in an array of records, a linked list, or (in more primitive languages) several arrays of different data types all using a common indexing scheme. 2. In relational databases, a data structure characterized by rows and columns, with data occupying or potentially occupying each cell formed by a row-column intersection. The table is the underlying structure of a relation." Computer Dictionary, 3rd Edition, Microsoft Press, Redmond, WA, 1997.9

⁷ While most definition(s) are cited because these terms are found in the claims, the Examiner may have provided additional definition(s) to help interpret words, phrases, or concepts found in the definitions themselves or in the prior art.

⁸ See e.g. *Brookhill-Wilk 1 LLC v. Intuitive Surgical Inc.*, 334 F.3d 1294, 1300, 67 USPQ2d 1132, 1137 (Fed. Cir. 2003) (abstract dictionary definitions are not alone determinative; "resort must always be made to the surrounding text of the claims in question").

⁹ Based upon Applicants' disclosure, the art of record, and the knowledge of one of ordinary skill in this art as determined by the factors discussed in MPEP §2141.03 (where practical), the Examiner finds that the *Microsoft Press Computer Dictionary* is an appropriate technical dictionary known to be used by one of ordinary skill in this art. See e.g. Altiris Inc. v. Symantec Corp., 318 F.3d 1363, 1373, 65 USPQ2d 1865, 1872 (Fed. Cir. 2003) where the Federal Circuit used the *Microsoft Press Computer Dictionary* (3d ed.) as "a technical dictionary" to define the term "flag." See also In re Barr, 444 F.2d 588, 170 USPQ 330 (CCPA 1971)(noting that its appropriate to use technical dictionaries

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Graphical User Interface "A type of environment that represents programs, files, and options by mean of icons, menus, and dialog boxes on the screen, The user can select and activate these options by pointing and clicking with a mouse or, often, with the keyboard..." Id.

Server: "2. On the Internet or other network, a computer or program that responds to commands from a client." <u>Id.</u> Client: "3. On a local area network or Internet, a computer that accesses shared network resources provided by another computer (called a server)." <u>Id.</u> Computer: "Any machine that does three things: accepts structured input, processes it according to prescribed rules, and produces the results as output." <u>Id</u>.

Relational Database "A database or database management system that stores information in tables—rows and columns of data—and conducts searches by using data in specified columns of one table to find additional data in another table. In a relational database, the rows of a table represent records (collections of information about separate items) and the columns represent fields (particular attributes of a record). In conducting searches, a relational database matches information from a field in one table with information in a corresponding field of another table to produce a third table that combines requested data from both tables. . . Microcomputer database products typically are relational databases. Compare flat-file database, inverted-list database." Id.

For "1 a — used as a function word to indicate purpose <a grant ~ studying medicine>" Merriam-Webster's Collegiate Dictionary, 10th Edition, Merriam-Webster Inc.,

Information "2 a . . . (3): FACTS, DATA . . . " Id.

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14. Functional recitation(s) using the word "for" or other functional terms (e.g. "for use with a model that generates optimal price markdown scenarios" as recited in claim 1) have been considered but given less patentable weight¹⁰ because they fail to add any steps and are thereby regarded as intended use language. A recitation of the intended use of the claimed invention must result in additional steps. See *Bristol-Myers Squibb Co. v. Ben Venue Laboratories, Inc.*, 246 F.3d 1368, 1375-76, 58 USPQ2d 1508, 1513 (Fed. Cir. 2001) (Where the language in a method claim states only a purpose and intended result, the expression does not result in a manipulative difference in the steps of the claim.).

15. Additionally, the Examiner notes that "the PTO and the CCPA acknowledged product-by-process claims as an exception to the general rule requiring claims to define products in terms of structural characteristics." *Atlantic Thermoplastics Co. v. Faytex Corp.*, 970 F.2d 834, 845, 23 USPQ2d 1481, 1490 (Fed. Cir. 1992) (hereinafter "*Atlantic Thermoplastics v. Faytex I*"). Furthermore, the Federal Circuit "acknowledges that it has in effect recognized ... product-by-process claims as exceptional." *Atlantic Thermoplastics v. Faytex I*, 970 F.2d at 847, 23 USPQ2d at 1491.

Because of this exceptional status, the Examiner has carefully reviewed the claims and it is the Examiner's position that claims 1-16 and 18 do not contain any product-by-process limitations whether in a conventional format or otherwise. If Applicants disagree with the Examiner, the Examiner respectfully requests Applicants in their next response to expressly point out any product-by-process claim(s) and their limitations so that they

Terminology.'

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may be afforded their exceptional status and treated accordingly. Applicants are reminded that "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself." *In re Thorpe*, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985) (citations omitted). Failure by Applicants in their next response to also address this issue in accordance with 37 C.F.R. §1.111(b) or to be non-responsive to this issue entirely will be considered intent by Applicants *not* to recite any product-by-process limitations. Unless expressly noted otherwise by the Examiner, the preceding discussion on product-by-process principles applies to all examined claims currently pending.

Conclusion

- 16. Other references considered pertinent to Applicants' disclosure are listed on form PTO-892.
- The following two (2) citations to the Manual of Patent Examining Procedure ("MPEP") apply to this Office Action: MPEP citations to Chapters 100, 200, 500, 600, 700, 1000, 1300, 1400, 1500, 1700, 1800, 2000, 2100, 2200, 2500, 2600, and 2700 are from the MPEP 8th Edition, Rev. 2, May 2004. All remaining MPEP citations are from MPEP 8th Edition, August 2001.
- 18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

¹⁰ See e.g. In re Gulack, 703 F.2d 1381, 217 USPQ 401, 404 (Fed. Cir. 1983)(stating that although all limitations must be considered, not all limitations are entitled to patentable weight).

¹¹ See also MPEP §2113.

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published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

- 19. In accordance with *In re Lee*, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002), the Examiner finds that the references How Computers Work

 Millennium Ed. by Ron White; How Networks Work, Millennium Ed. by Frank J.

 Derfler et. al.; and How the Internet Works, Millennium Ed. by Preston Gralla are additional evidence of what is basic knowledge or common sense to one of ordinary skill in this art. Each reference is cited in its entirety. Moreover, because these three references are directed towards beginners (see *e.g.* "User Level Beginning . . ."), because of the references' basic content (which is self-evident upon review of the references), and after further review of the entire application and all the art now of record in conjunction with the factors as discussed in MPEP §2141.03 (where practical), the Examiner finds that these three references are primarily directed towards those of low skill in this art.

 Because these three references are directed towards those of low skill in this art, the Examiner finds that one of ordinary skill in this art must—at the very least—be aware of and understand the knowledge and information contained within these three references.
- 20. Also in accordance with *In re Lee*, the Examiner finds that Hirschey et. al.'s Managerial Economics, 8th Ed. is additional evidence of what is basic knowledge or common sense to one of ordinary skill in this art. The reference is cited in its entirety. Managerial Economics provides a basic foundation for understanding economic theory

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and analysis and its application to individuals, households, firms, nonprofit organizations, and government entitles. Because the reference is an economic textbook directed towards students, because of the reference's basic content (which is self-evident upon examination of the reference) and after further review of the entire record including the prior art now of record in conjunction with the factors as discussed in MPEP §2141.03 (where practical), the Examiner finds that the Managerial Economics is primarily directed towards those of low skill in this art. Because the reference is directed towards those of low skill in this art, the Examiner finds that one of ordinary skill in this art must—at the very least—be aware of and understand the knowledge and information contained within the reference.

21. In accordance with the USPTO's goals of customer service, compact prosecution, and reduction of cycle time, the Examiner has made every effort to clarify his position regarding claim interpretation and any rejections or objections in this application.

Furthermore, the Examiner has provided Applicants with notice—for due process purposes—of his position regarding his factual determinations and legal conclusions. If Applicants disagree with any factual determination or legal conclusion made by the Examiner in this Office Action whether expressly stated or implied, 12 the Examiner respectfully reminds Applicants to properly traverse the Examiner's position(s) in accordance with 37 C.F.R. §1.111(b) in their next response. By addressing these issues now, matters where the Examiner and Applicants agree can be eliminated allowing the Examiner and Applicants to focus on areas of disagreement (if any) with the goal towards allowance in the shortest possible time. If Applicants have any questions regarding the

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Examiner's positions or have other questions regarding this communication or even previous communications, Applicants are strongly encouraged to contact Examiner Andrew J. Fischer whose telephone number is (703) 305-0292. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's immediate supervisor, Robert Olszewski, can be reached at (703) 308-5183. To respond to this Office Action by facsimile, fax to (703) 872-9306.

Andrew J. Fischer Patent Examiner Art Unit 3627

Offischer 12/4/04

AJF December 9, 2004

¹² E.g., if the Examiner rejected a claim under §103 with two references, although not directly stated, it is the Examiner's implied position that the references are analogous art.